

ABSTRACT

In order to provide a film having excellent heat

oriented thermoplastic resin film containing the transition metal oxide particles is controlled at 0.120 or more and less than 0.280.

5 properties, in particular, a film capable of satisfying required properties, e.g., higher strength in accordance with the reduction in thickness of a base film, improved thermal dimensional stability and mechanical properties in a use environment, and higher heat resistance and improved thermal dimensional stability in accordance with the needs for miniaturization and more functionality in electrical and electronic areas, a thermoplastic resin is allowed to contain transition metal oxide particles, and is formed into a biaxially oriented thermoplastic resin film, wherein the melting point of the film is allowed to become higher than the melting point of the thermoplastic resin to be used. Preferably, the difference between a peak temperature (melting point T_1) of the heat of fusion in the first run of the measurement of the biaxially oriented thermoplastic resin film with a differential scanning calorimeter (DSC) and a peak temperature (melting point T_2) of the heat of fusion in the second run is allowed to satisfy the following Formula.

$$2^{\circ}\text{C} \leq T_1 - T_2 \leq 30^{\circ}\text{C}$$

25 Alternatively, the plane orientation factor of the biaxially